STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

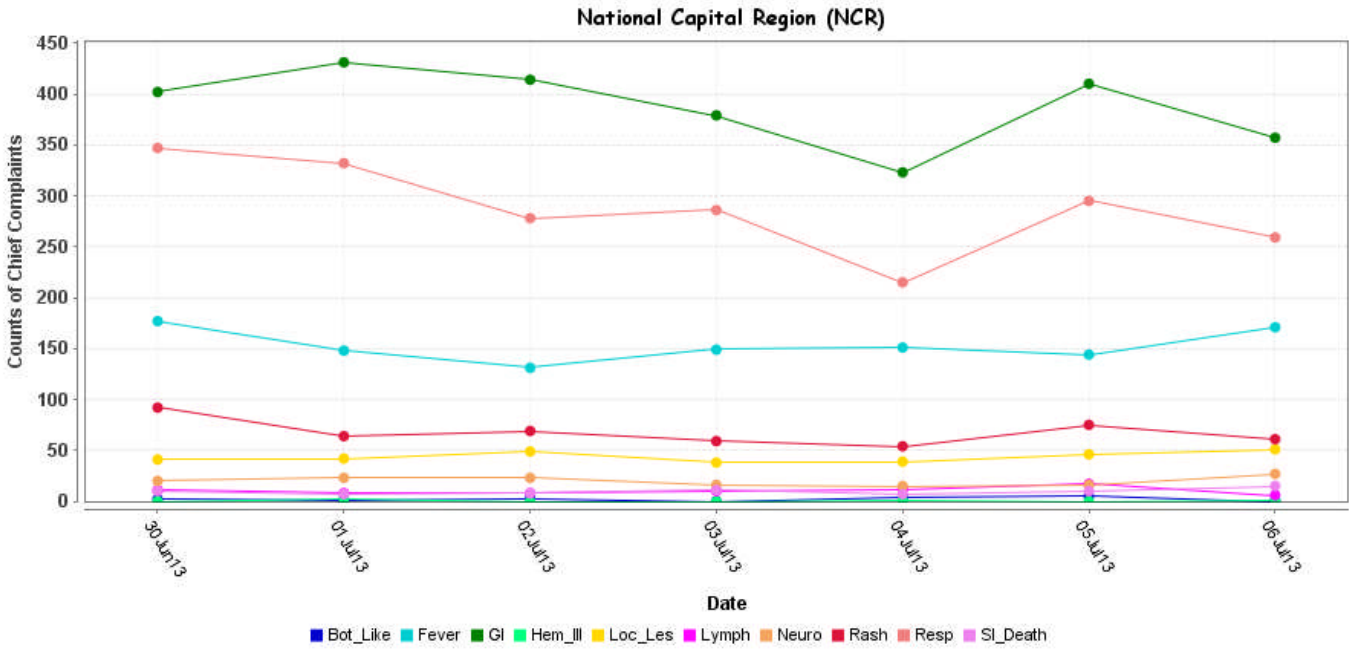
July 12, 2013

Public Health & Emergency Preparedness Bulletin: # 2013:27
Reporting for the week ending 07/06/13 (MMWR Week #27)

CURRENT HOMELAND SECURITY THREAT LEVELS

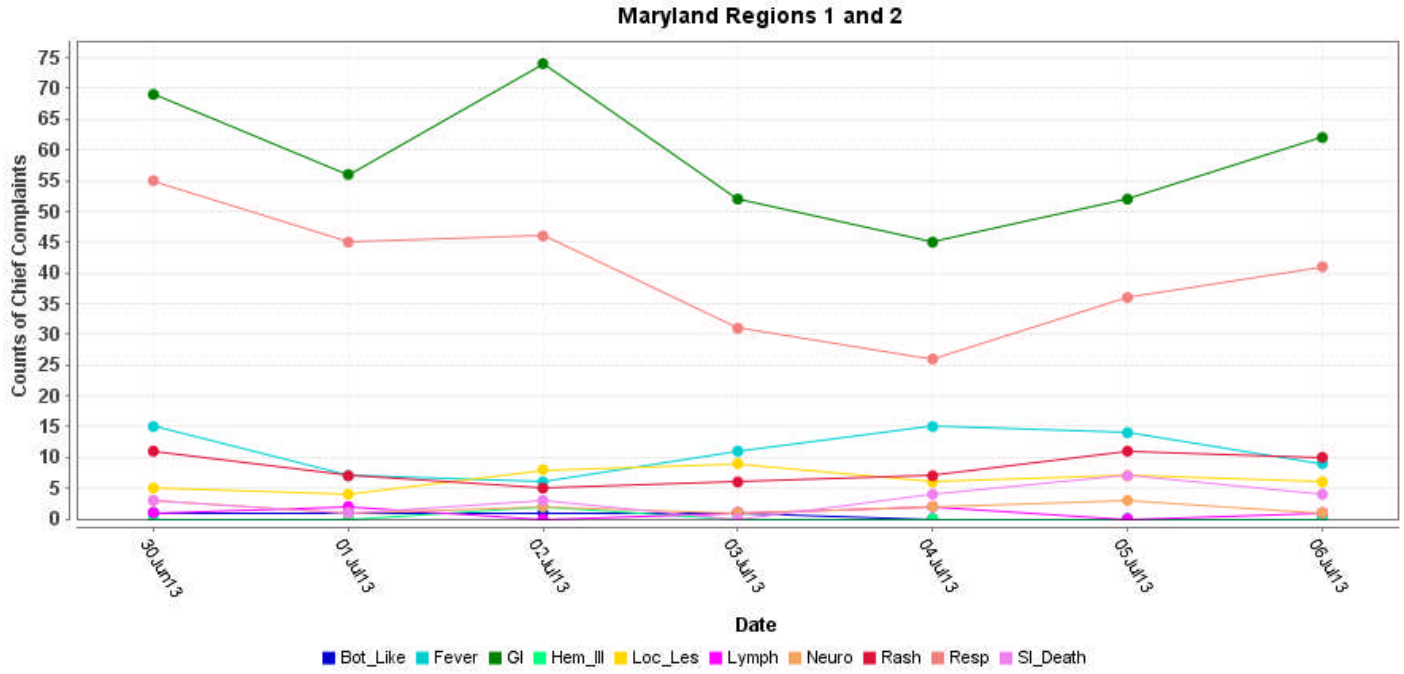
National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

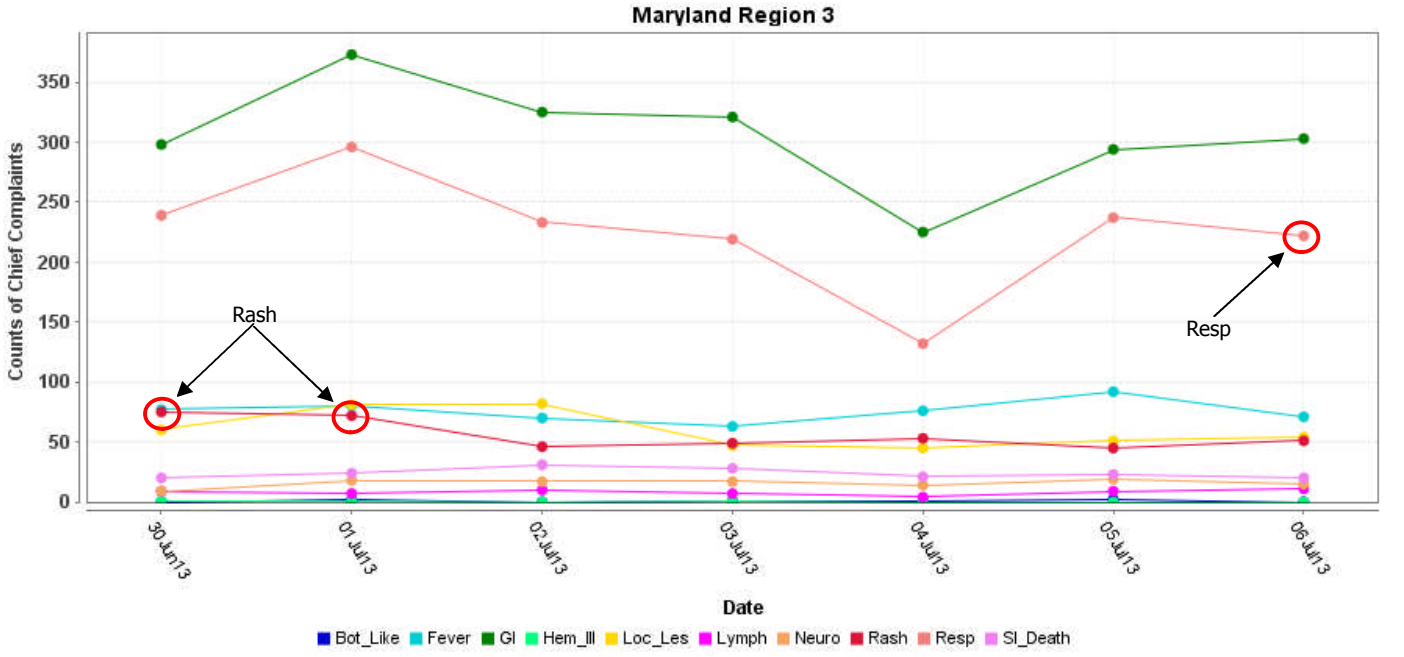


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

MARYLAND ESSENCE:



* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



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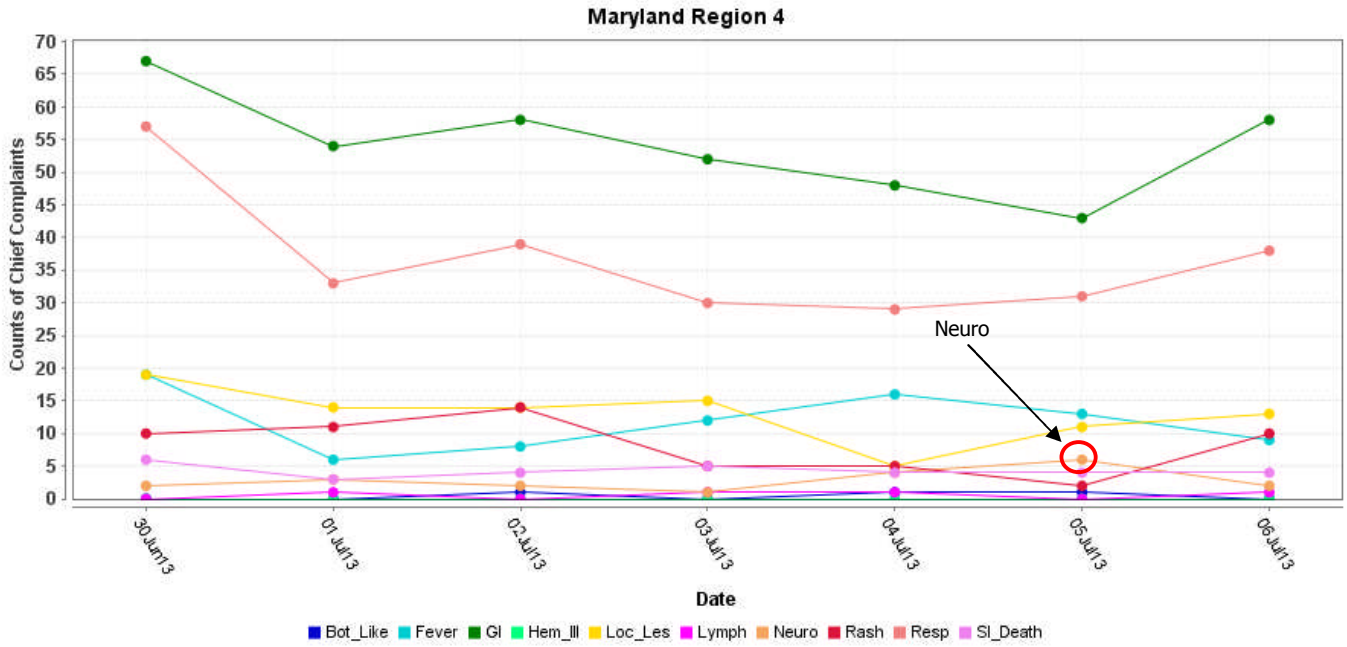
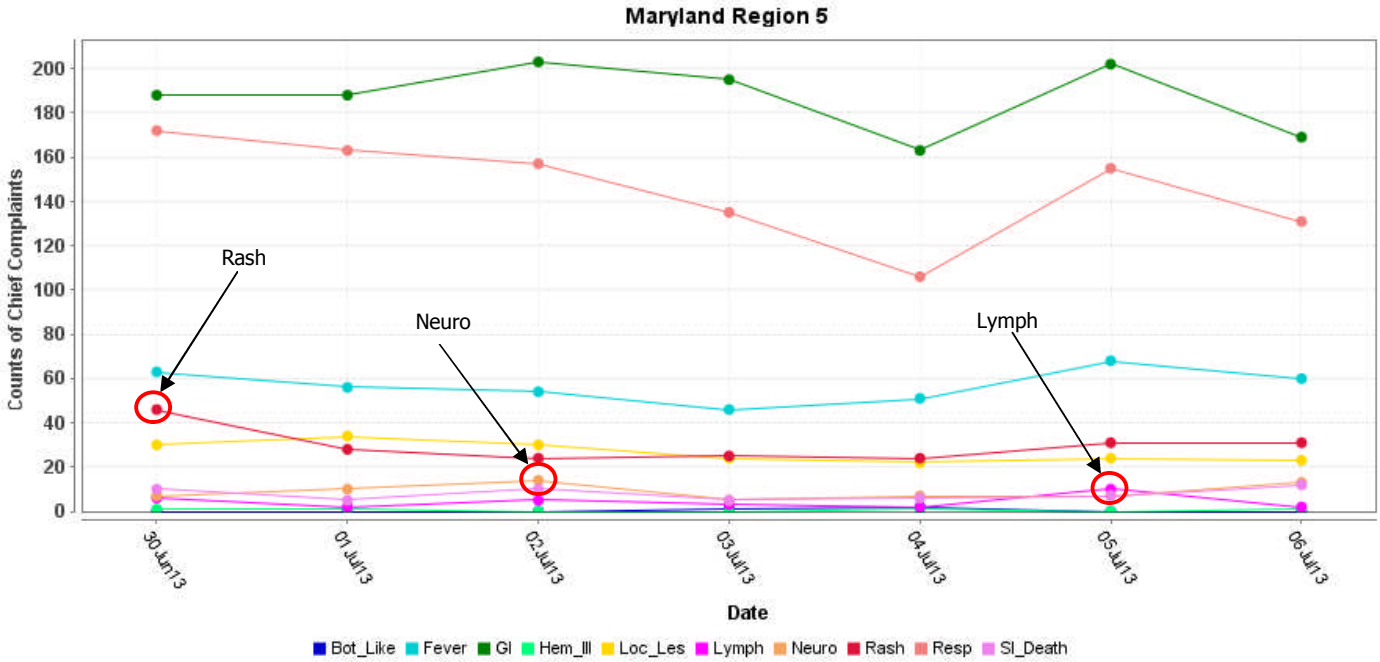
Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



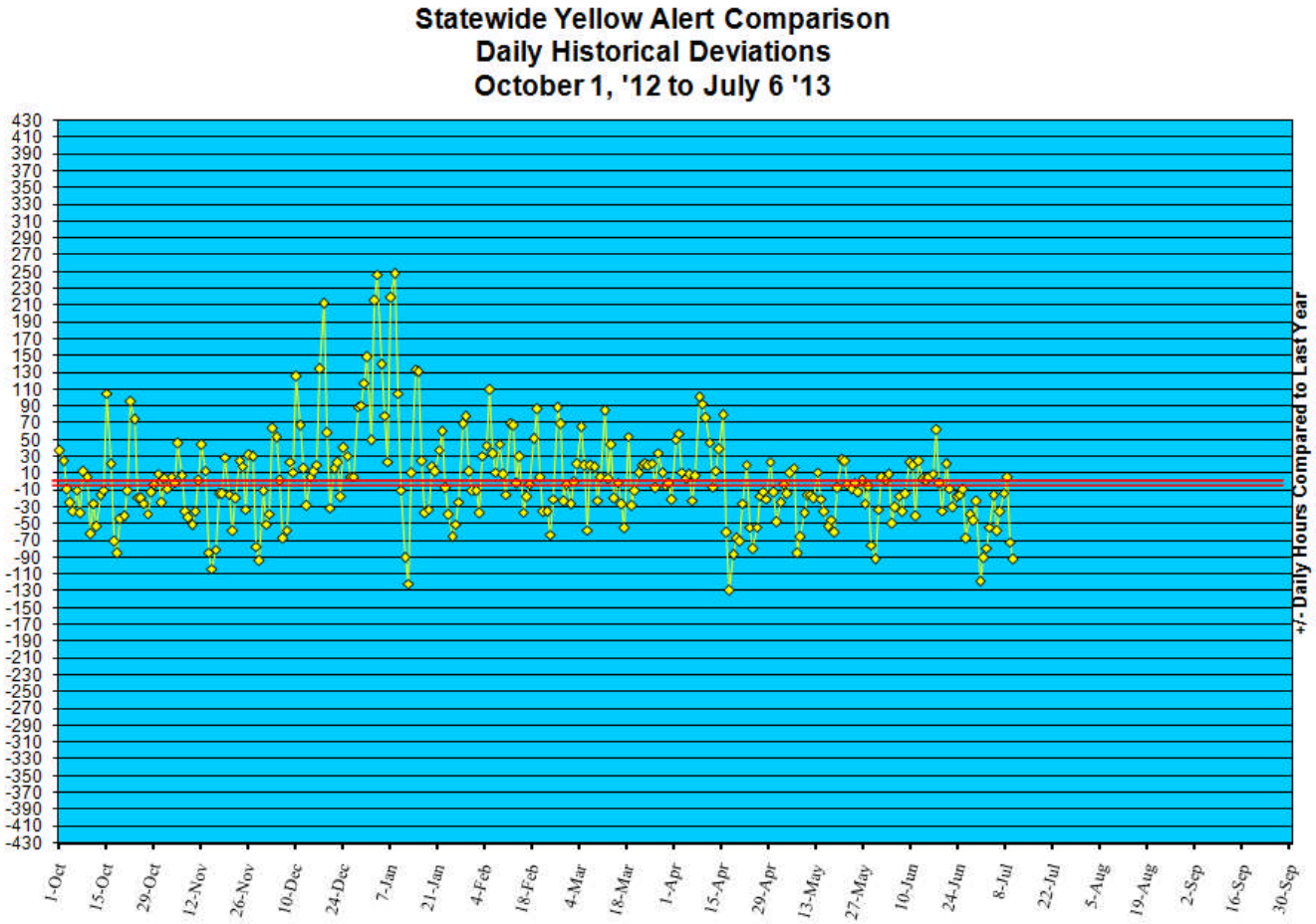
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in May 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (June 30- July 6, 2013):	10	0
Prior week (June 23 – June 29, 2013):	2	0
Week#27, 2012 (July 2 – July 8, 2012):	15	0

3 outbreaks were reported to DHMH during MMWR Week 27 (June 30 – July 6, 2013)

1 Gastroenteritis Outbreak
1 outbreak of GASTROENTERITIS in a Hospital

2 Respiratory Illness Outbreaks
1 outbreak of PNEUMONIA in a Nursing Home
1 outbreak of PNEUMONIA in an Assisted Living Facility

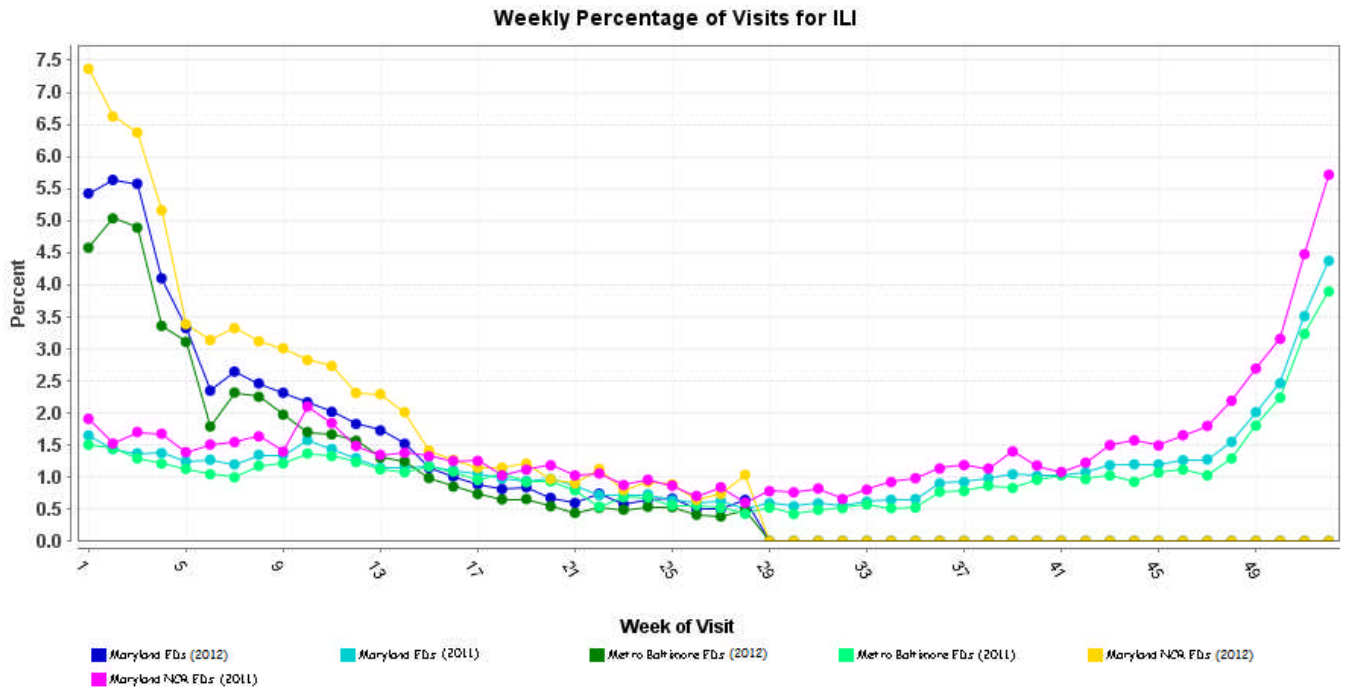
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May.

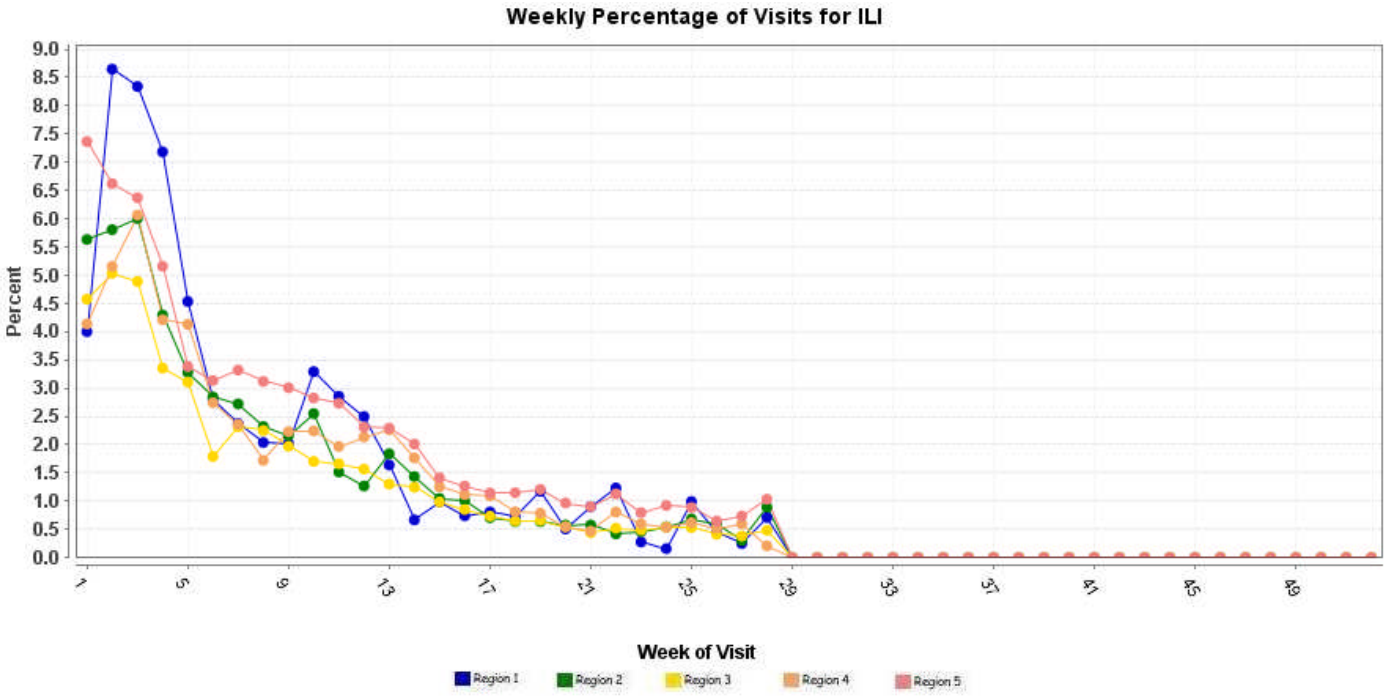
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



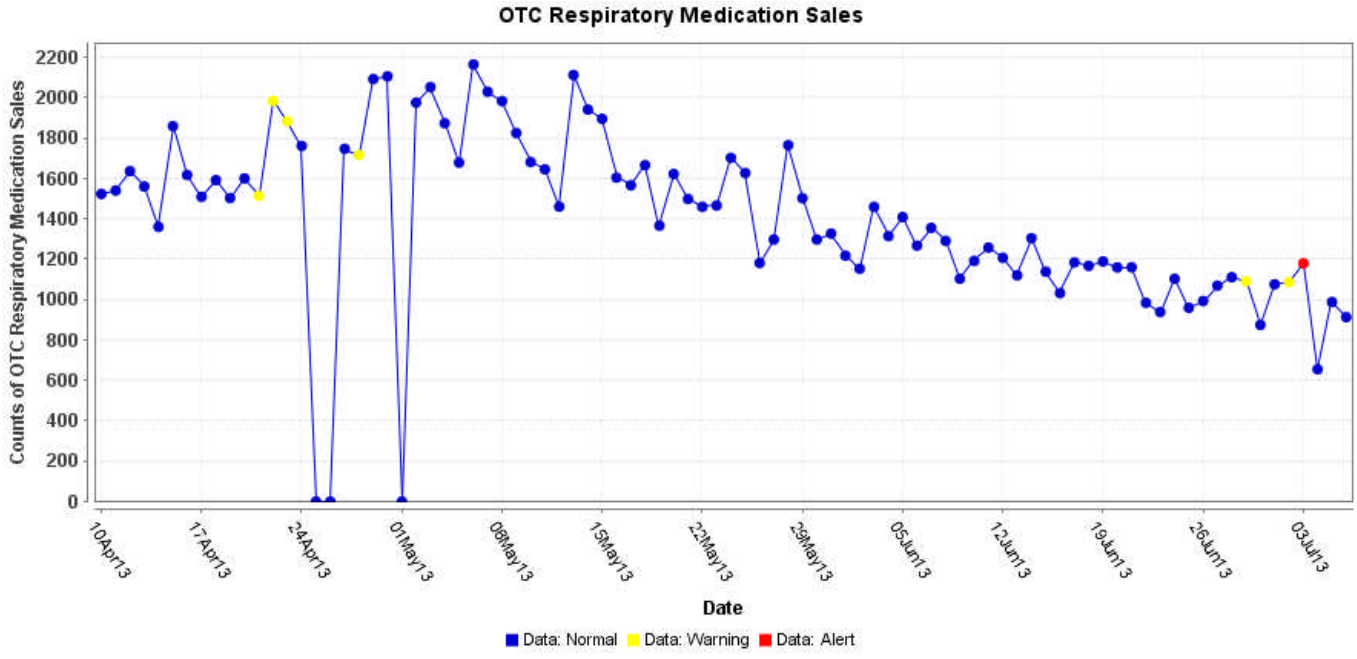
* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2013 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far. Influenza A(H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of June 4, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 630, of which 375 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 60%.

AVIAN INFLUENZA, HUMAN, H3N2/H7N9 (CHINA): 4 July 2013, The National Health and Family Planning Commission, China, notified WHO of an additional retrospectively detected laboratory-confirmed case of human infection with avian influenza A(H7N9) virus. The patient is a 15-year-old boy reported from Jiangsu who became ill on 25 Apr 2013 and hospitalized on 26 Apr 2013. He recovered and was discharged on 2 May 2013. The results of molecular diagnostics were positive for H3N2 seasonal influenza virus and H7N9 avian influenza virus. On 1 Jul 2013, Jiangsu Provincial Health Department consulted national and provincial experts for diagnosis. To date, WHO has been informed of a total of 133 laboratory-confirmed cases [of avian influenza A/(H7N9) virus], including 43 deaths. Authorities in affected locations continue to maintain surveillance, epidemiological investigations, close contact tracing, clinical management, laboratory testing and sharing of samples, as well as prevention and control measures. So far, there is no evidence of sustained human-to-human transmission. Until the source of infection has been identified and controlled, it is expected that there will be further cases of human infection with this virus. WHO does not advise special screening at points of entry with regard to this event, nor does it currently recommend any travel or trade restrictions. WHO continues to work with Member States and international partners to monitor the situation. WHO will provide updates as the situation evolves.

NATIONAL DISEASE REPORTS*

BOTULISM (NEW YORK): 06July 2013, In March 2012, the New York City Department of Health and Mental Hygiene (DOHMH) received 2 reports of recent immigrants from China admitted to the same hospital 23 days apart for suspected foodborne botulism. Patient 1 had a laboratory-confirmed case of foodborne botulism, and patient 2 had a probable case; patient 1's case was definitively associated with home-fermented tofu, and patient 2's case might have been associated with home-fermented tofu. Both patients had purchased fresh tofu from the same Chinese grocery in Queens, a New York City borough, in January 2012, and each had prepared home-fermented tofu using similar recipes. Similar fermentation practices at the 2 homes might have facilitated toxin production. Testing confirmed botulinum toxin type B in home-fermented tofu consumed by patient 1. Bulk tofu at the grocery in Queens was found to be sold in unrefrigerated, uncovered, water-filled bins. Traceback revealed that the grocery's fresh bulk tofu supplier at the time of the patients' purchases had gone out of business. DOHMH advised the grocery's manager of the need to properly store bulk tofu. Public health responders and clinicians should be aware of the association between botulism and fermented tofu. (Botulism is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

BOTULISM (USA): 2 July 2013, The Rhode Island Department of Health advises consumers not to eat Mediterranean Olives: Calcidica Sweet (Brand: Bel Frantoio) sold at any Ocean State Job Lot (OSJL) stores. OSJL is voluntarily recalling the product after Department of Health staff discovered that these products were not handled appropriately to prevent production of the toxin that causes botulism. Mediterranean Olives: Calcidica Sweet, produced by Bel Frantoio and packaged in 34-oz. plastic containers, were sold in OSJL stores in New York and throughout the Northeast (Rhode Island, Massachusetts, Connecticut, New Hampshire, Vermont, and Maine). This product is being voluntarily recalled because it is labeled "Keep Refrigerated," but was sold at room temperature, making it susceptible to germination of spores of *Clostridium botulinum*. Other olive products produced by Bel Frantoio that were sold at Ocean State Job Lot, as well as other brands of olives, do not currently pose a safety issue. This recall applies only to this product sold at Ocean State Job Lot. This product sold elsewhere, where refrigerated, is safe for consumption. Ingestion of botulinum toxin from improperly stored foods can lead to serious illness and death. No illnesses associated with this recall have been reported at this time. (Botulism is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

LEGIONELLOSIS (SCOTLAND): 2 July 2013, Another 2 persons have been admitted to hospital with legionnaires' disease in the greater Glasgow area, taking the number of confirmed cases to 5. The 2 patients are being treated in hospital and are responding well to treatment, NHS Greater Glasgow and Clyde (NHSGGC) said. The health board reported 3 cases last week [week of 24 Jun 2013], with 2 of the patients having been released from hospital and the 3rd described as in a stable condition and responding well to treatment. Health experts have identified Renfrew as a common factor in all 5 cases and investigations into the source of the disease are being focused on the town. 2 of the 5 cases live in the Renfrew area and the other 3 cases have either visited or worked there during the 2-week incubation period of the disease. Dr Gillian Penrice, NHSGGC [National Health Service Greater Glasgow and Clyde] consultant in public health, said: "So far Renfrew appears to be the only common factor we have identified between the cases. As such we are focusing our further investigations in this area for any possible sources of the disease. We are working closely with our partners in Renfrewshire Council, other local authorities, the Health and Safety Executive and Health Protection Scotland to investigate possible sources. These investigations include visiting all water cooling towers within a 4-mile [6.4 km] radius of the homes of the Renfrew cases, which follows national guidance on the investigation of such cases." Legionnaires' disease is an uncommon but serious form of pneumonia, caused by bacteria distributed widely in natural and artificial water supplies. The symptoms include headache, fever, dry cough, breathing difficulties, stomach pains, and diarrhea. The health board said water cooling towers in the Renfrewshire area are being treated with chemicals as a precautionary measure. Samples from water supplies are also being examined but test results will not been known for some time, it said. Dr Penrice added: "It is important to remember *Legionella* cannot be spread from person to

person. *Legionella* cannot be contracted by drinking contaminated water and residents in the Renfrew area should continue to drink water and prepare food in the normal way." An outbreak of the disease in southwest Edinburgh last summer [2012] led to the deaths of 3 men among 101 confirmed and suspected cases. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

HEPATITIS A (EUROPEAN UNION): 4 July 2013, The Nordic countries faced a food-borne outbreak of hepatitis A that started in October 2012 and was ongoing with 103 reported cases as of 27 Jun 2013. A case-control study in Denmark, Finland, Norway and Sweden, combined with trace-back investigations, has identified frozen strawberries as the likely cause of the outbreak. The origin of the berries is still being investigated. Hepatitis A virus seroprevalence is under 10 percent in Nordic countries [1] where endemicity is very low. In February 2013, Denmark noticed an increase in the number of notified hepatitis A virus (HAV) infections among individuals with no travel history. On 1 Mar 2013, following an urgent enquiry posted through the European Epidemic Intelligence Information System for food- and waterborne diseases (EPIS-FWD), Finland, Norway and Sweden reported a similar increase and identified cases that were infected with the same IB genotype and sequence (KC876797) as the Danish cases, as well as cases with closely related sequences. In March 2013, a case-control study conducted in Denmark identified frozen berries, particularly frozen strawberries, as the likely vehicle of the outbreak, but could not exclude other frozen berries. As a result of this finding, the 4 Nordic countries recommended boiling all frozen berries before consumption. While public health institutes in the 4 countries coordinated their data collection methods to pool the analysis of the country-specific case-control studies to identify the vehicle of the outbreak more precisely, investigators compared the outbreak strains with the HAV network (HAVNET) database to gain information on the probable phylogenetic origin of the outbreak strains, and food agencies analysed product distribution and tested fruit specimens. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

MERS-COV (SAUDI ARABIA): 5 July 2013, The Ministry of Health (MoH) in Saudi Arabia has announced 2 additional laboratory-confirmed cases and 2 deaths in previously confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV) infection in Saudi Arabia. The new cases are a 69-year-old male and a 66-year-old male from Riyadh. Both were admitted to hospital on [28 Jun 2013] and are currently in critical condition in an intensive care unit. In addition, the 2 deaths in previously confirmed cases are a 63-year-old female from Riyadh and a 75-year-old male from Al Ahsa. Globally, from September 2012 to date, WHO has been informed of a total of 79 laboratory-confirmed cases of infection with MERS-CoV, including 42 deaths. Based on the current situation and available information, WHO encourages all Member States to continue their surveillance for severe acute respiratory infections (SARI) and to carefully review any unusual patterns. Health care providers are advised to maintain vigilance. Recent travelers returning from the Middle East who develop SARI should be tested for MERS-CoV as advised in the current surveillance recommendations. Specimens from patients' lower respiratory tracts should be obtained for diagnosis where possible. Clinicians are reminded that MERS-CoV infection should be considered even with atypical signs and symptoms, such as diarrhea, in patients who are immunocompromised. Health care facilities are reminded of the importance of systematic implementation of infection prevention and control (IPC). Health care facilities that provide care for patients suspected or confirmed with MERS-CoV infection should take appropriate measures to decrease the risk of transmission of the virus to other patients, health care workers and visitors. All Member States are reminded to promptly assess and notify WHO of any new case of infection with MERS-CoV, along with information about potential exposures that may have resulted in infection and a description of the clinical course. Investigation into the source of exposure should promptly be initiated to identify the mode of exposure, so that further transmission of the virus can be prevented. WHO does not advise special screening at points of entry with regard to this event nor does it currently recommend the application of any travel or trade restrictions. WHO continues to closely monitor the situation. (Emerging Infectious Diseases are listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

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Web Site: www.dhmh.maryland.gov